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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/524,413	02/14/2005	Hiroki Matsumoto	047991-5018	4573

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EXAMINER

PETKOVSEK, DANIEL J

ART UNIT	PAPER NUMBER
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2874

DATE MAILED: 02/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/524,413	Applicant(s) MATSUMOTO ET AL.	
	Examiner <i>Dep 1/31/06</i> Daniel J. Petkovsek	Art Unit 2874	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on application filed February 14, 2005.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/14/05</u> | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Information Disclosure Statement*

2. The prior art documents submitted by Applicant in the Information Disclosure Statements filed on February 14, 2005, have been considered and made of record (note attached copy of forms PTO-1449).

### *Specification*

3. The disclosure is objected to because of the following informalities: *continuing* data needs to be mentioned in the 1<sup>st</sup> paragraph of the specification (can be an insert). Please list the *continuing* data from the application, as a 371 of PCT/JP03/10372, filed August 15, 2003.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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5. Claims 1-4, 6, 7, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Toshiyuki et al. JP 2001210123 A.

Toshiyuki et al. JP 2001210123 A teaches (ABS, Solution, Figs. 1, 7, and 8) a plate-shaped light guide 10 for a planar light source device, which guides light emitted from a primary light source 1, the light guide comprising: a light incident face 11 which the light emitted from the primary light source 1 enters and a light emitting face 12 from which the guided light is emitted, wherein the light emitting face 12 is a finely uneven surface, having an average slant angle of the finely uneven surface in a range of 0.3 to 30 degrees, and a ten-point average roughness in a range of 0.7  $\mu\text{m}$  to 10  $\mu\text{m}$  (see Figs), which clearly, fully meets Applicant's claimed limitations.

Regarding claim 2, the average roughness is in a range of 0.08  $\mu\text{m}$  to 1.5  $\mu\text{m}$ .

Regarding claim 3, a large number of convexly shaped curved surface areas exist (see Figs.).

Regarding claim 4, see Fig. 1 for rectangular plate shape with light incident on one edge.

Regarding claim 6, see prism sheet 40 (deflection element(s)) with the prisms formed on the light incoming surface.

Regarding claims 7 and 9, see Fig. 1 for the orientation of the prisms in a direction parallel to an edge of the light guide facing the light incident face, in which the light source can be linear.

*Claim Rejections - 35 USC § 103*

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 5, 8, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toshiyuki et al. JP 2001210123 A.

Toshiyuki et al. JP 2001210123 A teaches (ABS, Solution, Figs. 1, 7, and 8) a plate-shaped light guide 10 for a planar light source device, which guides light emitted from a primary light source 1, the light guide comprising: a light incident face 11 which the light emitted from the primary light source 1 enters and a light emitting face 12 from which the guided light is emitted, wherein the light emitting face 12 is a finely uneven surface, having an average slant angle of the finely uneven surface in a range of 0.3 to 30 degrees, and a ten-point average roughness in a range of 0.7  $\mu\text{m}$  to 10  $\mu\text{m}$ .

Toshiyuki et al. '123 does not explicitly teach that the light incident face is formed corresponding to a corner portion (claim 5) of the rectangular plate shaped light guide, with the prisms extending to the corner portion (claim 8) using a spot light source (claim 10).

At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to use either the light incident face at either the edge or the corner (with the prisms extending to the corner portion thereof) of a rectangularly shaped light guide because Applicant has not disclosed that having a light incident face formed corresponding to a corner portion provides an advantage, is used for a particular purpose, or

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solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the light incident face at either the corner or the edge of the light guide, because the light guide would deflect light to the light emitting face in the same manner in both cases, and it was well known in the art at the time the invention was made to have incident light to an edge or a corner of a light guide for the purpose of having different optical effects for the source device. Regarding claim 10, the use of a spot light source was well known in the art at the time the invention was made, and would have been obvious to a person having ordinary skill in order to improve optical coupling capabilities as desired.

Therefore, it would have been an obvious matter of design choice to modify Toshiyuki et al. '123 to obtain the invention as specified in claims 5, 8, and 10.

### *Conclusion*

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure, with respect to the state of the art of plate-shaped light guides: PTO-892 form references A-D.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Petkovsek whose telephone number is (571) 272-2355. The examiner can normally be reached on M-F 8:30-5:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Daniel Petkovsek  
January 31, 2006



**AKM ENAYET ULLAH**  
**PRIMARY EXAMINER**